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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,683	08/30/2001	Hideaki Watanabe	09792909-5124	9983

26263 7590 04/20/2006

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EXAMINER
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HO, THOMAS M

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/943,683

Applicant(s)

WATANABE ET AL.

Examiner

Thomas M. Ho

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-30 are pending.
2. The RCE of 2/14/06 has been received and entered.

***Examiner's Comment***

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 8, 9, 10, 12, 14, 15, 17, 24-26, 28, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Aucsmith et al., US patent 5878144.

In reference to claim 1:

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Aucsmith et al. discloses a person authentication system executing person authentication by comparing a template which is previously acquired person identification data with sampling information input by a user, said system comprising:

- A person identification authority which create a person identification certificate for storing the template (Column 10, lines 1-60) & (Column 11, lines 1-64) and which issues the person identification certificate to an entity which executes person authentication, (Column 12, lines 17- Column 13, line 30) & (Column 1, lines 65 – Column 2, lines 26) & (Column 7, line 55-Column 8, line 5)
- Wherein
- Said person identification authority acquires the template and data for person identification from the user to be certified with the person identification certificate, and encrypts the template using a public key and creates and registers, on the basis of the identification of the user, the person identification certificate for storing the encrypted template which is the person identification data, (Column 5, lines 8-37)
- The entity which decrypts the encrypted template stored in the person identification certificate and executes person authentication compares the decrypted template with the sampling information of the user so as to execute person authentication, and (Column 12, lines 17-34)
- The public key used to encrypt or decrypt the template stored in the person identification certificate being a different public key depending upon the entity which executes authentication of a person. (Column 12, lines 17-34)

In reference to claim 8:

Aucsmith et al. discloses the system according to claim 1, wherein said person identification authority issues, in response to a request from the entity which executes person authentication, the registered person identification certificate to the entity, and in the issuing of the person identification certificate to the entity, the template to be stored in the person identification certificate is issued as an encrypted data which may be decrypted in the entity, where the template is stored within the certificate (Column 10, lines 40-56) and where the certificate is encrypted as a digital signature (Column 5, lines 8-38) & (Column 1, lines 30-40) & (Column 2, lines 1-25), and where the encrypted data may be decrypted. (Column 12, lines 15-33)

In reference to claim 9:

Aucsmith et al. discloses the system according to claim 1, wherein said person identification authority issues, in response to a request from the entity which executes person authentication, the registered person identification certificate to the entity, and in the issuing of the person identification certificate to the entity, the template to be stored in the person identification certificate is issued as data encrypted with a public key of the entity, where the template is stored within the certificate (Column 10, lines 40-56) and where the certificate is encrypted as a digital signature (Column 5, lines 8-38) & (Column 1, lines 30-40) & (Column 2, lines 1-25), and where the encrypted data is encrypted with a public key, (Column 5, lines 8-38)

In reference to claim 10:

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Aucsmith et al. discloses the system according to claim 1, wherein said person identification authority updates, in response to a request from the entity which executes person authentication, the person identification certificate previously issued to the entity, and in the updating of the person identification certificate to the entity, a new person identification of which validity is reset is used to the entity, where when the data of the person identification certificate is updated, for example, if the stored person's fingerprint, hand print, or voice print changes over time, the validity may be reset to an "invalid" state. (Column 7, lines 55 – Column 8, lines 14)

In reference to claim 12:

Aucsmith et al. discloses the system according to claim 1, wherein said person identification authority performs comparison for verification based on the person identification certificate in response to a request from the entity which executes person authentication, and in the comparison for verification of the person identification certificate of the entity, the sampling information received from the entity is compared with the template in the person identification certificate stored in said person identification authority, and a comparison result is provided as a response to the entity. (Column 4, lines 10-20) & (Column 5, lines 8-38) & (Figure 12)

In reference to claim 14:

Aucsmith et al. (Column 2, lines 10-25) & (Column 5, lines 8-38) & (Column 7, lines 55 – Column 8, line 14) & (Column 10, line 1 – Column 12, line 15) discloses the system according to claim 1, wherein the template to be stored in the person identification certificate created by

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said person identification authority comprises biometric information of a person selected from the group consisting of fingerprint information, retina pattern information, iris pattern information, voice print information, and hand writing information; non-biometric information selected from the group consisting of a seal impression, a passport, a driver's license, and a credit card; any combination of two or more of the biometric information and the non-biometric information; or a combination of any of the biometric or non-biometric information and a password.

In reference to claim 15:

Aucsmith et al. (Column 4, lines 13- 57) & (Column 5, lines 8-38) discloses the system according to claim 1, wherein the person identification certificate issued by said person identification authority includes the digital signature written by said person identification authority.

In reference to claim 17:

Aucsmith et al. discloses a person authentication method for executing person authentication by comparing a template which is previously acquired person identification data with sampling information input by a user, said method comprising the steps of:

- Creating a person identification certificate for storing the template and issuing the person identification certificate to an entity which executes person authentication in a person identification authority. (Column 7, line 55-Column 8, line 5)
- Acquiring the template and data for person identification from the user to be certified with the person identification certificate (Column 4, lines 10-20) & (Column 10, line 1-

Column 12, line 15), and encrypting the template using a public key and creating and registering, on the basis of the identification of the user(Column 3, lines 25-36), the person identification certificate for storing the encrypted template which is the person identification data, (Column 5, lines 8-38)

- Decrypting the encrypted template and comparing the decrypted template with the sampling information of the user so as to execute person authentication in the entity which executes person authentication, the public key used to encrypt or decrypt the template stored in the person identification certificate being a different public key depending upon the entity which executes authentication of a person. (Column 12, lines 18-33)

Claim 24 is substantially similar to claim 8 and is rejected for the same reasons.

Claim 25 is substantially similar to claim 9 and is rejected for the same reasons.

Claim 26 is substantially similar to claim 10 and is rejected for the same reasons.

Claim 28 is substantially similar to claim 12 and is rejected for the same reasons.

In reference to claim 30:

Aucsmith et al. discloses a program providing medium for providing a computer program which executes person authentication in a computer system by comparing a template which is previously acquired person identification data with sampling information input by a user, said computer program comprising the steps of:



- Acquiring the template and data for person identification from the user to be certified with a person identification certificate (Column 4, lines 10-20), & (Column 7, line 55 – Column 8, line 13) & (Column 10, line 1- Column 12, line 15)
- Encrypting the template using a public key, (Column 5, lines 8-38)
- Creating and registering, on the basis of the identification of the user, the person identification certificate for storing the encrypted template which is the person identification data, (Column 1, lines 65 – Column 2, lines 26) & (Column 5, lines 8-38) & (Column 10, line 1- Column 12, line 15)
- Decrypting the encrypted template and comparing the decrypted template with the sampling information of the user so as to execute person authentication in the entity which executes person authentication, the public key used to encrypt or decrypt the template stored in the person identification certificate being a different public key depending upon the entity which executes authentication of a person. (Column 12, lines 18-33)

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-7, 11, 13, 16, 18-23, 27, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aucsmith et al., US patent 5878144.

In reference to claim 2:

Aucsmith et al. fails to disclose the system according to claim 1, wherein said person identification authority acquires a template deleting request and the data for person identification from the user to be certified with the person identification certificate, deletes the template from the person identification certificate, and registers the person identification certificate in a revocation list on the basis of the identification of the user.

The Examiner takes official notice that deleting a certificate and the information therein and placing such certificate in a CRL was well known at the time of invention.

For Example, "Public Key Certificate Revocation Schemes" by Andre Arnes discloses a method of deleting the extensions to a certificate, such as a template.

Arnes, page 9, paragraph 3 discloses a method of revoking a certificate, where the full information for each certificate is excluded, but only the revocation information.

Arnes teaches that by deleting information that isn't necessary for its listing as a revoked certificate in a CRL, the network load can be reduced and the burden of transmitting large portions of the certificate that are not necessary to indicate its revoked status can be optimized.

It would have been obvious to one of ordinary skill in the art at the time of invention to delete the template from the certificate and register the certificate in a CRL in order to reduce the network load of computers maintain the deleted certificates.

In reference to claim 3:

Claim 3 is substantially similar to claim 2, the only difference being that claim 3 recites the generation of a new certificate with a new template information and data. Claim 3 is rejected for the same reasons as claim 2 with Aucsmith et al. (Column 5, lines 8 – 38) & (Column 4, lines 45-55) reciting the additional generation of a certificate with template information.

In reference to claim 4:

Aucsmith et al. fails to disclose the system according to claim 1, wherein said person identification authority acquires an additional template and the data for person identification, together with a template addition request from the user to be certified with the person identification certificate, and creates and registers a person identification certificate for storing the additional template as well as the template of user on the basis of the identification of the user.

Aucsmith et al. however does disclose a certificate that is specifically designed for data extensions, or information that may be added onto the certificate to provide information about the user. (Figures 3-9) While Aucsmith et al. does not explicitly disclose a request to add an additional template to the certificate, the invention of Aucsmith et al. may store a number of data

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items to additionally identify a user. Moreover, the information to form this template is referred to as “extension data” with its particular “extension identifier”.

This information is used by Aucsmith et al. to validate the user. (Column 4, lines 10-20)

Aucsmith et al. further teaches that “sufficient information must be present to specifically identify the owner of the certificate” (Column 5 lines 8-38)

It would have been obvious to one of ordinary skill in the art to store an additional template of user information into the certificate of Aucsmith in order to better validate the owner of the certificate.

In reference to claim 5:

Aucsmith et al. fails to disclose the system according to claim 1, wherein said person identification authority acquires the data for person identification together with a template suspension request from the user to be certified with the person identification certificate, invalidates the template stored in the person identification certificate, and registers the person identification certificate in the revocation list, on the basis of the identification of the user.

The Examiner takes official notice that a template suspension request was well known to those of ordinary skill in the art at the time of invention.

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US patent 6044462 (Column 3, lines 1-20) & (Column 3, line 60 – Column 4, line 10) & (Figures 7, 8) discloses suspending a particular certificate and subsequently registering the certificate in a CRL.

Aucsmith et al. (Column 7, line 55 – Column 8, line 10) additionally teaches that changing biometric information over time may invalidate the certificate.

It would have been obvious to one of ordinary skill in the art at the time of invention to suspend a certificate that was suspected of being invalidated in order to maintain an accurate record of which information is certified and which information was not.

In reference to claim 6:

Claim 6 is substantially similar to claim 5 except for the difference that the certificate suspension request may be rescinded. US patent 6044462 (Column 3, lines 1-20) & (Column 3, line 60 – Column 4, line 10) & (Column 8, lines 1-13) (Figures 7, 8) further discloses the additional limitation of claim 6 where a suspended certificate may have its suspension canceled once the suspension period is up.

Claim 7 recites the steps of deletion, changing, addition, suspension, or the canceling of the suspension of claims 2-6 and is rejected for the same reasons as claims 2-6.

Claims 11 and 13, 27, 29 are rejected for the same reasons as claim 2.

Claim 18 is substantially similar to claim 2 and is rejected for the same reasons.

Claim 19 is substantially similar to claim 3 and is rejected for the same reasons.

Claim 20 is substantially similar to claim 4 and is rejected for the same reasons.

Claim 21 is substantially similar to claim 5 and is rejected for the same reasons.

Claim 22 is substantially similar to claim 6 and is rejected for the same reasons.

Claim 23 is substantially similar to claim 7 and is rejected for the same reasons.

### ***Conclusion***

8. The following art not relied upon is made of record:

- RFC 2459 “Internet x.509 Public Key Infrastructure Certificate and CRL Profile” discloses the X.509 digital certificate standard.
- US patent 6035398 discloses a cryptographic key generation method using biometric data
- US patent 6108788 discloses a certificate management system where the certificates contain user information templates.
- US patent 6310966 discloses a biometric certificate processing method.

9. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571)272-6962.

The Examiner may also be reached through email through [Thomas.Ho6@uspto.gov](mailto:Thomas.Ho6@uspto.gov)

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist Telephone: 571-272-2100 Fax: 571-273-8300

Customer Service Representative Telephone: 571-272-2100 Fax: 571-273-8300

TMH



April 16<sup>th</sup>, 2006

